

1. A method comprising:

identifying where at least two digital images overlap at a first resolution level;

obtaining overlapping areas of the at least two digital images at a second resolution level higher than the first resolution level; and

identifying where the overlapping areas overlap at the second resolution level.

2. The method of claim 1, wherein each of the at least two digital images are stored at the first and second resolution levels; and

wherein the obtaining comprises retrieving the overlapping areas from the at least two digital images at the second resolution level.

3. The method of claim 1, wherein the method comprises:

storing the at least two digital images at the first resolution level in memory to identify where the at least two digital images overlap at the first resolution level; and

purging the memory of the at least two digital images prior to obtaining the overlapping areas;

wherein the obtaining comprises storing the overlapping areas in the memory.

4. The method of claim 1, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where the overlapping areas overlap at the second resolution level each comprise using an edge detection technique.

SUB A1 5. The method of claim 1, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and
wherein the obtaining comprises identifying the overlapping areas based on the identified coordinates.

6. The method of claim 1, comprising:
combining the at least two digital images.

7. The method of claim 1, comprising:
identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

SUB A2 8. The method of claim 1, comprising:
identifying where another set of at least two digital images overlap at the first resolution level;
obtaining overlapping areas of the other set of at least two digital images at the second resolution level;
identifying where the overlapping areas of the other set of at least two digital images overlap at the second resolution level; and
combining the digital images.

9. A computer readable medium having computer executable instructions for:
identifying where at least two digital images overlap at a first resolution level;
obtaining overlapping areas of the at least two digital images at a second resolution level
higher than the first resolution level; and
identifying where the overlapping areas overlap at the second resolution level.

10. The computer readable medium of claim 9, wherein each of the at least two digital
images are stored at the first and second resolution levels; and
wherein the obtaining comprises retrieving the overlapping areas from the at least two
digital images at the second resolution level.

11. The computer readable medium of claim 9, having computer executable instructions for:
storing the at least two digital images at the first resolution level in memory to identify
where the at least two digital images overlap at the first resolution level; and
purging the memory of the at least two digital images prior to obtaining the overlapping
areas;
wherein the obtaining comprises storing the overlapping areas in the memory.

12. The computer readable medium of claim 9, wherein the identifying where the at least two
digital images overlap at the first resolution level and the identifying where the overlapping areas
overlap at the second resolution level each comprise using an edge detection technique.

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13. The computer readable medium of claim 9, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and

wherein the obtaining comprises identifying the overlapping areas based on the identified coordinates.

14. The computer readable medium of claim 9, having computer executable instructions for combining the at least two digital images.

15. The computer readable medium of claim 9, having computer executable instructions for identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

16. The computer readable medium of claim 9, having computer executable instructions for: identifying where another set of at least two digital images overlap at the first resolution level;

obtaining overlapping areas of the other set of at least two digital images at the second resolution level;

identifying where the overlapping areas of the other set of at least two digital images overlap at the second resolution level; and

combining the digital images.

17. A computer system comprising:

- (a) one or more processors;
- (b) computer readable medium to store instructions which, when executed by the one or more processors, perform:

- (i) identifying where at least two digital images overlap at a first resolution level,
- (ii) obtaining overlapping areas of the at least two digital images at a second resolution level higher than the first resolution level, and
- (iii) identifying where the overlapping areas overlap at the second resolution level.

18. The computer system of claim 17, comprising computer readable medium to store each of the at least two digital images at the first and second resolution levels; and

wherein the obtaining comprises retrieving the overlapping areas from the at least two digital images at the second resolution level.

19. The computer system of claim 17, wherein the computer readable medium stores instructions for:

storing the at least two digital images at the first resolution level in memory to identify where the at least two digital images overlap at the first resolution level; and

purging the memory of the at least two digital images prior to obtaining the overlapping areas;

wherein the obtaining comprises storing the overlapping areas in the memory.

20. The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level and the identifying where the overlapping areas overlap at the second resolution level each comprise using an edge detection technique.

21. The computer system of claim 17, wherein the identifying where the at least two digital images overlap at the first resolution level comprises identifying coordinates where the at least two digital images at the first resolution level overlap; and

wherein the obtaining comprises identifying the overlapping areas based on the identified coordinates.

22. The computer system of claim 17, wherein the computer readable medium stores instructions for combining the at least two digital images.

23. The computer system of claim 17, wherein the computer readable medium stores instructions for identifying where the at least two digital images overlap at one or more resolution levels higher than the second resolution level.

24. The computer system of claim 17, wherein the computer readable medium stores instructions for:

identifying where another set of at least two digital images overlap at the first resolution level;

obtaining overlapping areas of the other set of at least two digital images at the second resolution level;

identifying where the overlapping areas of the other set of at least two digital images overlap at the second resolution level; and
combining the digital images.

25. A computer system comprising:

means for identifying where at least two digital images overlap at a first resolution level;
means for obtaining overlapping areas of the at least two digital images at a second resolution level higher than the first resolution level; and
means for identifying where the overlapping areas overlap at the second resolution level.

26. The computer system of claim 25, comprising:

means for storing the at least two digital images at the first resolution level in memory to identify where the at least two digital images overlap at the first resolution level; and
means for purging the memory of the at least two digital images prior to obtaining the overlapping areas;

wherein the obtaining means comprises means for storing the overlapping areas in the memory.

27. The computer system of claim 25, comprising:

means for combining the at least two digital images.